

We do the right thing.

#### **Saltstone Operations**

# Presented to the SRS Citizens Advisory Board Waste Management Committee









Steve Wilkerson
Savannah River Nuclear Solutions
Waste Treatment Manager
10/19/10

SRR-WTF-2010-00016

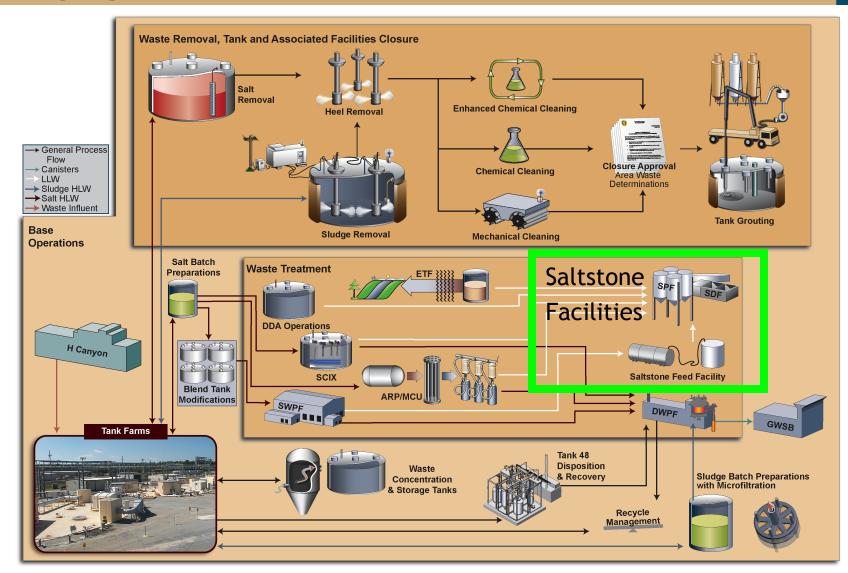


#### **Outline**

- Liquid Waste Flowsheet
- Operating History
- Process Overview
- Future Operations
- Recent Processing History
- FY11 Activities



## **Liquid Waste Flowsheet**

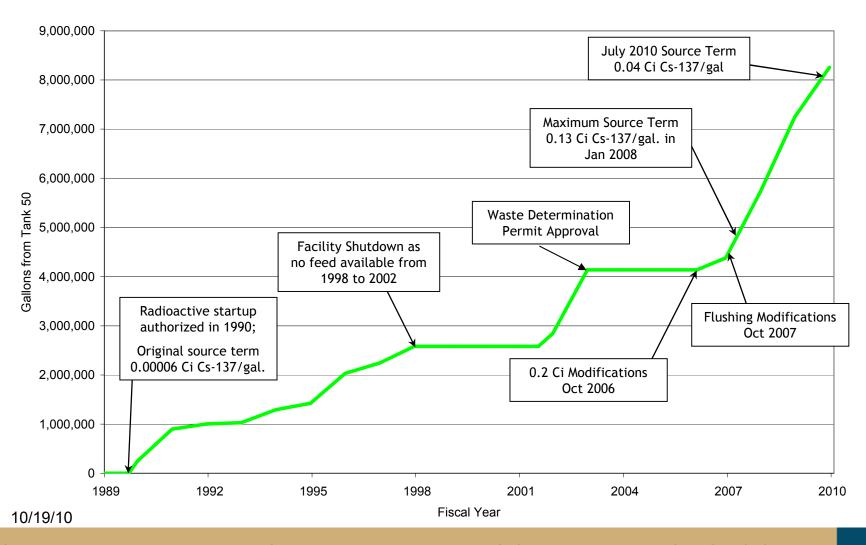




### **Operating History**

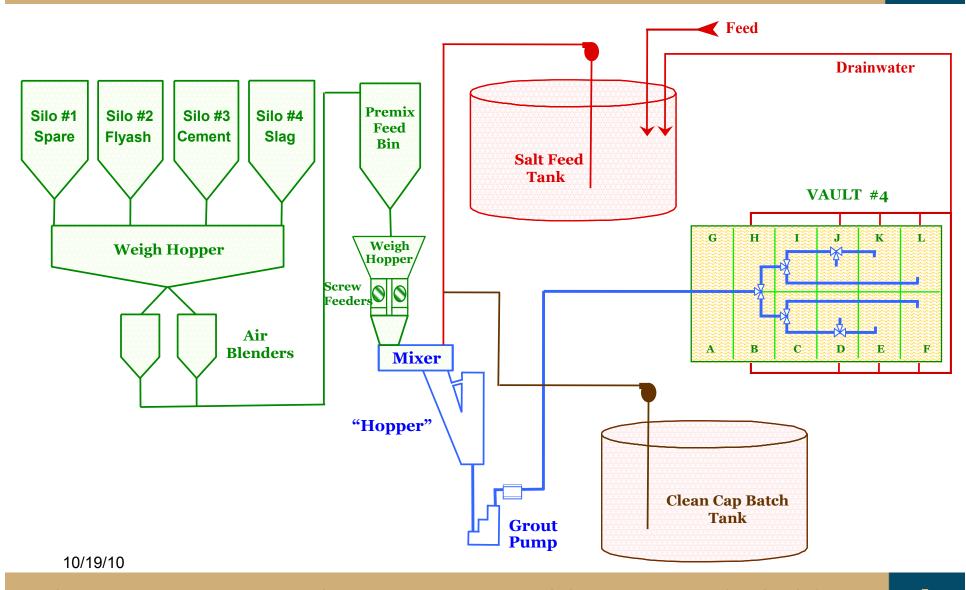
We do the right thing.

#### **Saltstone Processing**





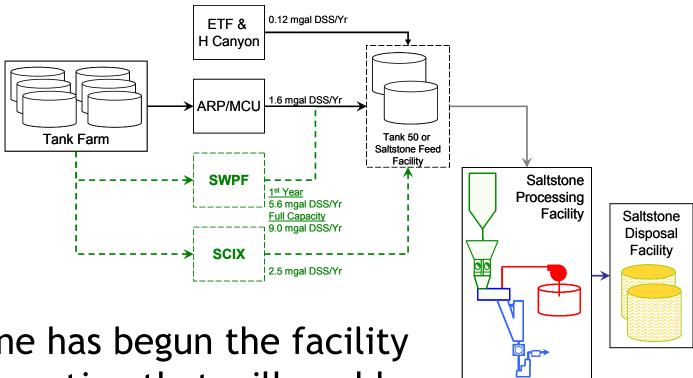
#### **Saltstone Process**





#### **Future Operations**

We do the right thing.



Saltstone has begun the facility transformation that will enable the continued fulfillment of all mission requirements.

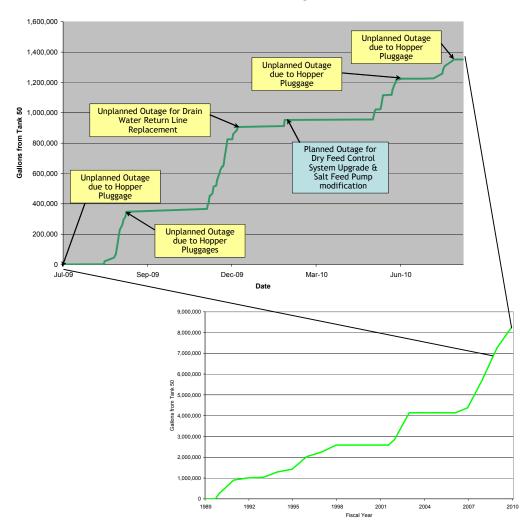


#### **Recent Processing History**

We do the right thing.

- Saltstone Production has fulfilled all Liquid Waste Mission requirements.
- Saltstone Production for the last 16 months has matched or exceeded historical performance.
- Waste processing has been intermittent due to both planned outages to install equipment upgrades and unplanned outages due to process pluggages.
- 0.2 Ci Modifications constrained operating margins to meet ALARA objectives.
- Future feed streams enable installation of alternate equipment designs.

#### **Saltstone Processing**

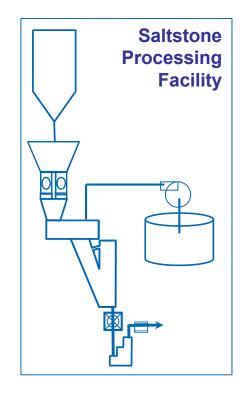


10/19/10



#### **FY11 Activities**

- Enhancements to meet the needs of salt processing capacity with supplemental salt processing initiatives deployed
- Equipment Upgrades
  - Dry Feed Control System
  - Salt feed pump
  - Hopper redesign
  - Air compressors
  - Grout mixture optimization
- Support 24/7 operations

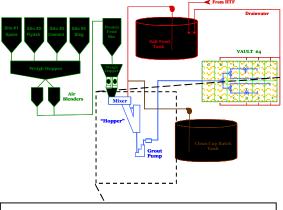






#### **FY11 Activities**

We do the right thing.



- Planned improvements have been systematically reviewed and prioritized to achieve greatest increase in operating margin and reliability.
- Work scopes will be "outage ready" by the end of FY11 with installation in FY12.
- FY11 Operations will concentrate on refining control parameters using current equipment.

Dry Feed Mixer Isolation Chute Hopper and flush redesign with increased operating capacity and agitation Mixer capability Analog Radar Level Detector New High Overflow / Vent Pressure flush New 4-way capability near dump valve to grout pump improve PW reliability **Grout Pump** Vault → New High Overflow Catch Pressure flush PW Container Level Indicator ΡW capability near grout pump

10/19/10



## **Back Up Information**





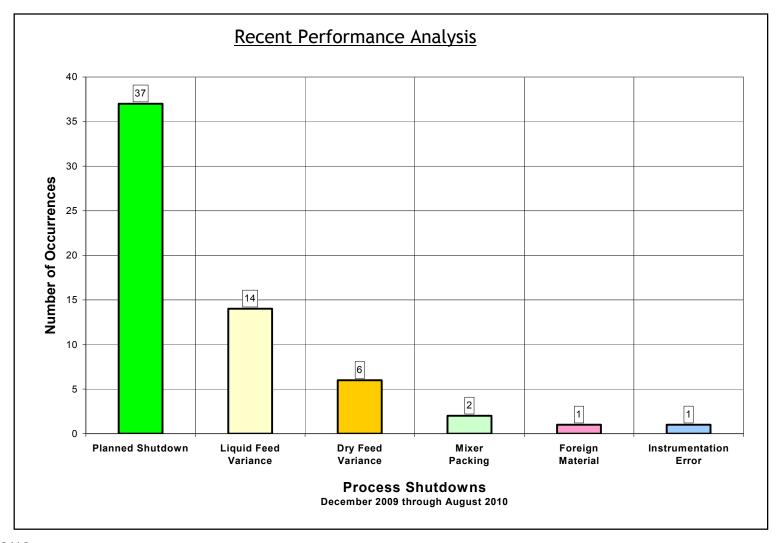






#### Saltstone Process Performance

We do the right thing.



10/19/10